

# Environmental Protection Agency

# Pt. 63, Subpt. DDD, Table 1

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f), as defined in § 63.90, and as required in this subpart.

[68 FR 37356, June 23, 2003]

§§ 63.1197–63.1199 [Reserved]

TABLE 1 TO SUBPART DDD OF PART 63—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART DDD OF PART 63

General provisions citation	Requirement	Applies to subpart DDD?	Explanation
63.1(a)(1)–(a)(4) .....	General Applicability .....	Yes.	
63.1(a)(5) .....		No .....	[Reserved].
63.1(a)(6)–(a)(8) .....		Yes.	
63.1(a)(9) .....		No .....	[Reserved].
63.1(a)(10)–(a)(14) .....		Yes.	
63.1(b) .....	Initial Applicability Determination ..	Yes.	
63.1(c)(1) .....	Applicability After Standard Estab- lished.	Yes.	
63.1(c)(2) .....		Yes .....	Some plants may be area sources.
63.1(c)(3) .....		No .....	[Reserved].
63.1(c)(4)–(c)(5) .....		Yes.	
63.1(d) .....		No .....	[Reserved].
63.1(e) .....	Applicability of Permit Program ....	Yes.	
63.2 .....	Definitions .....	Yes .....	Additional definitions in § 63.1196.
63.3 .....	Units and Abbreviations .....	Yes.	
63.4(a)(1)–(a)(3) .....	Prohibited Activities .....	Yes.	
63.4(a)(4) .....		No .....	[Reserved].
63.4(a)(5) .....		Yes.	
63.4(b)–(c) .....	Circumvention/Severability .....	Yes.	
63.5(a) .....	Construction/Reconstruction Ap- plicability.	Yes.	
63.5(b)(1) .....	Existing, New, Reconstructed Sources Requirements.	Yes.	
63.5(b)(2) .....		No .....	[Reserved].
63.5(b)(3)–(b)(6) .....		Yes.	
63.5(c) .....		No .....	[Reserved].
63.5(d) .....	Application for Approval of Con- struction/Reconstruction.	Yes.	
63.5(e) .....	Approval of Construction/Recon- struction.	Yes.	
63.5(f) .....	Approval of Construction/Recon- struction Based on State Re- view.	Yes.	
63.6(a) .....	Compliance with Standards and Maintenance Applicability.	Yes.	
63.6(b)(1)–(b)(5) .....	New and Reconstructed Sources Dates.	Yes.	
63.6(b)(6) .....		No .....	[Reserved].
63.6(b)(7) .....		Yes.	
63.6(c)(1) .....	Existing Sources Dates .....	Yes .....	§ 63.1180 specifies compliance dates.
63.6(c)(2) .....		Yes.	
63.6(c)(3)–(c)(4) .....		No .....	[Reserved].
63.6(c)(5) .....		Yes.	
63.6(d) .....		No .....	[Reserved].
63.6(e)(1)–(e)(2) .....	Operation & Maintenance Re- quirements.	Yes .....	§ 63.1187 specifies additional re- quirements.
63.6(e)(3) .....	Startup, Shutdown, and Malfunc- tion Plan.	Yes.	
63.6(f) .....	Compliance with Emission Stand- ards.	Yes.	
63.6(g) .....	Alternative Standard .....	Yes.	
63.6(h) .....	Compliance with Opacity/VE Standards.	No .....	Subpart DDD does not include VE/opacity standards.
63.6(i)(1)–(i)(14) .....	Extension of Compliance .....	Yes .....	§ 63.1180 specifies date.
63.6(i)(15) .....		No .....	[Reserved].
63.6(i)(16) .....		Yes.	
63.6(j) .....	Exemption from Compliance .....	Yes.	
63.7(a) .....	Performance Test Requirements Applicability.	Yes.	

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General provisions citation	Requirement	Applies to subpart DDD?	Explanation
63.7(b) .....	Notification .....	Yes.	§ 63.1188 specifies additional requirements.
63.7(c) .....	Quality Assurance/Test Plan .....	Yes.	
63.7(d) .....	Testing Facilities .....	Yes.	
63.7(e) .....	Conduct of Tests .....	Yes .....	
63.7(f) .....	Alternative Test Method .....	Yes.	
63.7(g) .....	Data Analysis .....	Yes.	Subpart DDD does not require CMS performance specifications.
63.7(h) .....	Waiver of Tests .....	Yes.	
63.8(a)(1) .....	Monitoring Requirements Applicability.	Yes.	
63.8(a)(2) .....	.....	No .....	
63.8(a)(3) .....	.....	No .....	
63.8(a)(4) .....	.....	Yes.	Subpart DDD does not require COMS or CMS performance specifications.
63.8(b) .....	Conduct of Monitoring .....	Yes.	
63.8(c)(1)–(c)(3) .....	CMS Operation/Maintenance .....	Yes.	
63.8(c)(4)–(c)(8) .....	.....	No .....	
63.8(d) .....	Quality Control .....	No .....	
63.8(e) .....	CMS Performance Evaluation .....	No .....	Subpart DDD does not require a CMS quality control program.
63.8(f)(1)–(f)(5) .....	Alternative Monitoring Method .....	Yes.	
63.8(f)(6) .....	Alternative to RATA Test .....	No .....	
63.8(g)(1) .....	Data Reduction .....	Yes.	
63.8(g)(2) .....	.....	No .....	
63.8(g)(3)–(g)(5) .....	.....	Yes.	Subpart DDD does not require COMS or CEMS.
63.9(a) .....	Notification Requirements Applicability.	Yes.	
63.9(b) .....	Initial Notifications .....	Yes.	
63.9(c) .....	Request for Compliance Extension.	Yes.	
63.9(d) .....	New Source Notification for Special Compliance Requirements.	Yes.	
63.9(e) .....	Notification of Performance Test ..	Yes.	Subpart DDD does not include VE/opacity standards.
63.9(f) .....	Notification of VE/Opacity Test .....	No .....	
63.9(g) .....	Additional CMS Notifications .....	No .....	
63.9(h)(1)–(h)(3) .....	Notification of Compliance Status .....	Yes.	
63.9(h)(4) .....	.....	No .....	
63.9(h)(5)–(h)(6) .....	.....	Yes.	[Reserved].
63.9(i) .....	Adjustment of Deadlines .....	Yes.	
63.9(j) .....	Change in Previous Information ..	Yes.	
63.10(a) .....	Recordkeeping/Reporting-Applicability.	Yes.	
63.10(b) .....	General Recordkeeping Requirements.	Yes .....	
63.10(c)(1) .....	Additional CMS Recordkeeping ..	Yes.	Subpart DDD does not require CMS performance specifications.
63.10(c)(2)–(c)(4) .....	.....	No .....	
63.10(c)(5) .....	.....	Yes.	
63.10(c)(6) .....	.....	No .....	
63.10(c)(7)–(c)(8) .....	.....	Yes.	
63.10(c)(9) .....	.....	No .....	[Reserved].
63.10(c)(10)–(c)(13) .....	.....	Yes.	
63.10(c)(14) .....	.....	No .....	
63.10(c)(15) .....	.....	Yes.	
63.10(d)(1) .....	General Reporting Requirements	Yes .....	
63.10(d)(2) .....	Performance Test Results .....	Yes.	Additional requirements in § 63.1193.
63.10(d)(3) .....	Opacity or VE Observations .....	No .....	
63.10(d)(4)–(d)(5) .....	Progress Reports/ Startup, Shutdown, and Malfunction Reports.	Yes.	

General provisions citation	Requirement	Applies to subpart DDD?	Explanation
63.10(e)(1)–(e)(2) .....	Additional CMS Reports .....	No .....	Subpart DDD does not require CEMS or CMS performance evaluations.
63.10(e)(3) .....	Excess Emissions/CMS Performance Reports.	Yes.	
63.10(e)(4) .....	COMS Data Reports .....	No .....	Subpart DDD does not require COMS.
63.10(f) .....	Recordkeeping/Reporting Waiver	Yes.	
63.11(a) .....	Control Device Requirements Applicability.	Yes.	
63.11(b) .....	Flares .....	No .....	Flares not applicable.
63.12 .....	State Authority and Delegations ..	Yes.	
63.13 .....	Addresses .....	Yes.	
63.14 .....	Incorporation by Reference .....	Yes.	
63.15 .....	Information Availability/Confidentiality.	Yes.	

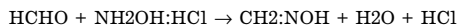
#### APPENDIX A TO SUBPART DDD OF PART 63—FREE FORMALDEHYDE ANALYSIS OF INSULATION RESINS BY THE HYDROXYLAMINE HYDROCHLORIDE METHOD

##### 1. Scope

The method in this appendix was specifically developed for water-soluble phenolic resins that have a relatively high free-formaldehyde (FF) content such as insulation resins. It may also be suitable for other phenolic resins, especially those with a high FF content.

##### 2. Principle

2.1 a. The basis for this method is the titration of the hydrochloric acid that is liberated when hydroxylamine hydrochloride reacts with formaldehyde to form formaloxime:



b. Free formaldehyde in phenolic resins is present as monomeric formaldehyde, hemiformals, polyoxymethylene hemiformals, and polyoxymethylene glycols. Monomeric formaldehyde and hemiformals react rapidly with hydroxylamine hydrochloride, but the polymeric forms of formaldehyde must hydrolyze to the monomeric state before they can react. The greater the concentration of free formaldehyde in a resin, the more of that formaldehyde will be in the polymeric form. The hydrolysis of these polymers is catalyzed by hydrogen ions.

2.2 The resin sample being analyzed must contain enough free formaldehyde so that the initial reaction with hydroxylamine hydrochloride will produce sufficient hydrogen ions to catalyze the depolymerization of the polymeric formaldehyde within the time limits of the test method. The sample should contain approximately 0.3 grams (g) free formaldehyde to ensure complete reaction within 5 minutes.

##### 3. Apparatus

- 3.1 Balance, readable to 0.01 g or better.
- 3.2 pH meter, standardized to pH 4.0 with pH 4.0 buffer and pH 7 with pH 7.0 buffer.
- 3.3 50-mL burette for 1.0 N sodium hydroxide.
- 3.4 Magnetic stirrer and stir bars.
- 3.5 250-mL beaker.
- 3.6 50-mL graduated cylinder.
- 3.7 100-mL graduated cylinder.
- 3.8 Timer.

##### 4. Reagents

- 4.1 Standardized 1.0 N sodium hydroxide solution.
- 4.2 Hydroxylamine hydrochloride solution, 100 grams per liter, pH adjusted to 4.00.
- 4.3 Hydrochloric acid solution, 1.0 N and 0.1 N.
- 4.4 Sodium hydroxide solution, 0.1 N.
- 4.5 50/50 v/v mixture of distilled water and methyl alcohol.

##### 5. Procedure

- 5.1 Determine the sample size as follows:
  - a. If the expected FF is greater than 2 percent, go to Part A in 5.1.c to determine sample size.
  - b. If the expected FF is less than 2 percent, go to Part B in 5.1.d to determine sample size.
  - c. Part A: Expected FF  $\geq 2$  percent.

Grams resin = 60/expected percent FF

I. The following table shows example levels:

Expected percent free formaldehyde	Sample size, grams
2 .....	30.0
5 .....	12.0
8 .....	7.5
10 .....	6.0
12 .....	5.0
15 .....	4.0